

Attorney Docket No.: 100794-01011 (FUJL 22.279)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor(s): Saied ABEDI
Confirmation No.: 5056
Serial No.: 10/567,313
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Title: **CELL SELECTION IN SOFT HANDOVER ...**
Examiner: Ariel A. Balaoing
Group Art Unit: 2617

October 20, 2009

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

PRE-APPEAL BRIEF REQUEST FOR REVIEW

SIR:

In connection with the Pre-Appeal Brief Request for Review submitted herewith and in response to the final Office Action dated July 22, 2009, Applicant requests a panel review to determine whether the Examiner has failed to properly establish bases for § 103 rejections of pending claims 1-32 and 34 in the subject application. And, in support thereof, Applicant respectfully submits the following:

REMARKS

Claim 33 has been canceled. Claims 1-32 and 34 are now pending in the application.

Claims 1-7, 9, 11-21, 23-32, and 34 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent Application Publication No. 2003/0083069 to Vadgama in view of U.S. Patent Application Publication No. 2002/0093953 to Naim et al.; claims 8 and 22 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Vadgama in view of Naim et al., and further in view of U.S. Patent Application No. 2002/0080719 to Parkvall et al.; and claim 10 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Vadgama in view of Naim et al., and further in view of U.S. Patent Application No. 2002/0048258 to Oyama. Applicant respectfully traverses the rejections.

The Examiner relied upon Vadgama as the principal reference that allegedly discloses the claimed active station selection features by describing “congestion based selection.” The Examiner conceded that Vadgama does not suggest the claimed data amount determination and comparison features, and relied upon Naim et al. as a combining reference that allegedly suggests these features.

Vadgama, as cited and relied upon by the Examiner, describe a cell selection technique based on a measured congestion level of a cell, whereas Naim et al. describe a resource allocation technique for a particular base station 12. Therefore, absent improper

hindsight from the claimed invention itself, the references would have, at most, suggested using a measured congestion level to select a particular cell, as described in Vadgama, and thereafter allocate resources of a base station servicing the selected cell based on criteria on respective mobile stations that are being serviced by the base station, as described in Naim et al.

The Examiner cited paragraph [0009] of Naim et al. and paragraphs [0086]-[0087] of Vadgama as alleged suggestion for the proposed combination of these references. Page 5, lines 2-7 of the final Office Action. But paragraph [0009] of Naim et al. only includes description of ineffective resource allocation of a particular base station, such as using dedicated channel assignment, causing mobile stations with high traffic to suffer packet delays/loss (or “congestion”). Such portions do not include any disclosure or even suggestion of cell congestion or handovers:

“Each base station may have only a limited number of channels to make these connections...In order to fairly allocate the resources available, it is necessary for the base station to make some judgment as to which mobile stations can utilize the channels, and for how long.” Paragraph [0004] of Naim et al.

Correspondingly, paragraphs [0086]-[0087] of Vadgama merely include description of using a number of buffered packets as a measure of congestion levels, and using parameters other than the number of buffered packets as a measure of congestion levels.

Thus, while the cited references describe a relationship between a buffer level and congestion related to that buffer, Naim et al. only describe resource allocation of a particular base station to reduce “congestion” of mobile stations being serviced by the base station, whereas Vadgama describe a wholly separate technique of selecting a cell based on congestion of the cell. In other words, neither reference provides any motivation or suggestion, nor does one skilled in the art have any objective reason absent improper hindsight from the claimed invention itself, to alter the disclosure of the cited references to perform cell selection, as described in Vadgama, based on buffer levels of mobile stations relative to one another. The claimed invention was clearly used as a blueprint for piecing together the disparate features described in Vadgama and Naim et al. to meet the recited features.

Therefore, Applicant respectfully submits that the Examiner has failed to establish a prima facie case of obviousness in failing to provide the motivation, suggestion, or objective

reason, absent improper hindsight from the claimed invention itself, to combine the cited references in the manner proposed to meet the features of the claimed invention.

In the July 22, 2009 final Office Action, the Examiner maintained the claim rejections by reciting the KSR standard for obviousness, where “teaching, suggestion, and motivation” are no longer explicit prerequisites for combining prior art references. Correspondingly, the Examiner cited a precedential opinion by the Board of Patent Appeals and Interferences based on this standard—Ex parte Smith.

Applicant, again, respectfully submits that Vadgama and Naim et al. each already describe distinct resource allocation techniques directed to different operating environments—Vagama describing cell selection, and Naim et al. describing resource allocation for a particular base station. And the Examiner has failed to establish a prima facie case of obviousness by failing to clearly provide any objective reason to alter the explicit disclosure in the cited references in combining them in the manner proposed.

Applicant refers to MPEP § 2141(III), which requires:

“The key to supporting any rejection under 35 U.S.C. 103 is the clear articulation of the reason(s) why the claimed invention would have been obvious. The Supreme Court in KSR noted that the analysis supporting a rejection under 35 U.S.C. 103 should be made explicit. The Court quoting In re Kahn, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006), stated that “‘[R]ejections on obviousness cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.’” KSR, 550 U.S. at ___, 82 USPQ2d at 1396.” (Emphasis added)

This requirement is reiterated in MPEP § 2143.01, where the following is added:

“IV.*>MERE STATEMENT< THAT THE CLAIMED INVENTION IS WITHIN THE CAPABILITIES OF ONE OF ORDINARY SKILL IN THE ART IS NOT SUFFICIENT BY ITSELF TO ESTABLISH PRIMA FACIE OBVIOUSNESS

A statement that modifications of the prior art to meet the claimed invention would have been “‘well within the ordinary skill of the art at the time the claimed invention was made’” because the references relied upon teach that all aspects of the claimed invention were individually known in the art is not sufficient to establish a prima facie case of obviousness without some objective reason to combine the teachings of the references. Ex parte Levengood, 28 USPQ2d 1300 (Bd. Pat. App. & Inter. 1993).” (Emphasis added)

The Examiner has not provided any articulated reasoning with rational underpinning to support the legal conclusion of obviousness. The Examiner has not provided any

motivation, suggestion, or objective reason, with evidentiary support or explicit analysis, for combining the cell selection technique described in Vadgama with the resource allocation technique for a particular base station described in Naim et al. in the manner proposed. Instead, the Examiner merely relied upon a conclusory statement that “both inventions (Vadgama and Naim et al.) relate to reducing congestion within a system.” Page 5, line 4 of the final Office Action. Thus, the Examiner clearly exercised improper hindsight from the claimed invention by using it as a template to piece together the disparate features of Vadgama and Naim et al. And even assuming, *arguendo*, that it would have been obvious to one skilled in the art at the time the claimed invention was made to combine Vadgama and Naim et al., such a combination would have, at most, suggested using a measured congestion level to select a particular cell, as described in Vadgama, and thereafter allocate resources of a base station servicing the selected cell based on criteria on respective mobile stations that are being serviced by the base station, as described in Naim et al. Such a combination would still have failed to disclose or suggest,

“...comparing the amounts of data in the data buffers of the user equipments to obtain a relative indicator, the relative indicator indicating how full one of the user equipments’ data buffer is in comparison to the data buffers of the other of the user equipments; and selecting a base station as the active base station for the one user equipment based on the relative indicator,” as recited in claim 1. (Emphasis added)

Accordingly, Applicant respectfully submits that claim 1, together with claims 2-7, 9, and 11-16 dependent therefrom, is patentable over Vadgama and Naim et al., separately and in combination, for at least the above-stated reasons. Claims 23 and 34 incorporate features that correspond to those of claim 1 cited above, and are, therefore, together with claims 24-32 dependent from claim 23, patentable over the cited references for at least the same reasons.

Paragraph [0031] of Naim et al., as cited by the Examiner for allegedly suggesting the claimed data amount comparison feature, only includes description of a base station allocating resources. Thus, Naim et al., as cited and relied upon by the Examiner—and correspondingly, the proposed combination of references—fail to disclose or even suggest a base station transmitting a relative indicator indicating how full one of the user equipments’ data buffer is in comparison to the data buffers of the other of the user equipments. In response to the Examiner’s contention in paragraph 3 of the final Office Action that Applicant is improperly “attacking references individually,” Applicant has merely pointed

out the deficiencies of the respective references with regard to the features for which they are being relied upon. And thus, the failure of a particular reference to suggest a feature for which it has been cited and relied upon renders the combination of references deficient since, for the present case, Vadgama clearly fails to cure the deficiency of failing to suggest a base station transmitting a relative indicator in connection with user equipment.

Thus, even assuming, arguendo, that it would have been obvious to one skilled in the art at the time the claimed invention was made to combine Vadgama and Naim et al., such a combination would still have failed to disclose or suggest,

“[a] base station for receiving data from a plurality of user equipments, the base station comprising:

...

a comparing unit which compares the amount of data in the data buffers of the user equipments to obtain a relative indicator, the relative indicator indicating how full one of the user equipments' data buffer is in comparison to the data buffers of the other of the user equipments;

a transmitting unit which transmits the relative indicator; ...,” as recited in claim 17. (Emphasis added)

Accordingly, Applicant respectfully submits that claim 17, together with claims 18-21 dependent therefrom, is patentable over Vadgama and Naim et al., separately and in combination, for at least the above-stated reasons.

The Examiner cited Parkvall et al. and Oyama as further combining references to specifically address the additional features of claims 8, 10, and 22, which depend from claims 1 and 17, respectively. As such, further combinations with these references would still have failed to cure the above-described deficiencies of Vadgama and Naim et al., even assuming, arguendo, that such further combinations would have been obvious to one skilled in the art at the time the claimed invention was made. Accordingly, Applicant respectfully submits that claims 8, 10, and 22 are patentable over the cited references for at least the above-stated reasons. Any fee due with this paper may be charged to Deposit Account No. 50-1290.

Respectfully submitted,

/Dexter T. Chang/

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